



## Chicanes and serpentine design

### Definition

An S-shaped curve in the vehicle driving path, created by offset curb extensions or by curving alignment (horizontal deflection), in an otherwise straight segment of roadway. Also called deviations, serpentines, reversing curve, twists, and staggerings.

### Objective

To slow motor vehicle traffic, reduce cut-through traffic, and increase drivers' attention to and awareness of the surroundings. Usually installed on low-volume residential streets.

### Advantage

Speed reduction.

Can dissuade cut-through traffic.

Heightens driver awareness and attention.

Provide opportunity for aesthetic enhancements (landscaping, signage, furnishings, etc.).

Can be created with on-street parking (parallel or diagonal).

### Challenge

Can be relatively costly to install.

May require the elimination of some on-street parking.

Can be difficult for drivers to see/understand at nighttime, which can be a safety problem.

May cause snow removal and street cleaning difficulties.

Must be designed so as to prevent high-speed weaving.

### Resources

ITE Traffic Calming Measures — Chicane <http://www.ite.org/traffic/chicane.asp>.

PedSafe — Chicane [http://www.pedbikesafe.org/PEDSAFE/countermeasures\\_detail.cfm?CM\\_NUM=33](http://www.pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=33).

Fehr & Peers Trafficcalming.org — Chicanes <http://trafficcalming.org/measures/chicanes/>.

Project for Public Places — Traffic Calming 101 — Chicanes <http://www.pps.org/reference/livememtraffic/#CHICANES>.

Mid-Block Speed Control: Chicanes and Speed Humps <http://www.seattle.gov/transportation/docs/ITerevfin.pdf>.

Traffic calming - an assessment of selected on-road chicane schemes [http://www.trl.co.uk/online\\_store/reports\\_publications/trl\\_reports/cat\\_traffic\\_engineering/report\\_traffic\\_calming\\_-\\_an\\_assessment\\_of\\_selected\\_on-road\\_chicane\\_schemes.htm](http://www.trl.co.uk/online_store/reports_publications/trl_reports/cat_traffic_engineering/report_traffic_calming_-_an_assessment_of_selected_on-road_chicane_schemes.htm).



Images (clockwise from main image):

Example of a chicane and serpentine design  
Source: Dylan Passmore, Flickr.

Additional examples:

Sources: Dan Burden, pedbikeimages.org; Richard Drdul, Flickr; Richard Drdul, Flickr; Dan Burden; Dan Burden, pedbikeimages.org.